

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

# PCT

To:

see form PCT/ISA/220

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/EP2004/011833

International filing date (day/month/year)  
18.10.2004

Priority date (day/month/year)  
17.10.2003

International Patent Classification (IPC) or both national classification and IPC  
F24F5/00, F28D5/00

Applicant  
OXYCELL HOLDING BV

### 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☒ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

### 2 FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

### 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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**Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

|                               |             |                   |
|-------------------------------|-------------|-------------------|
| Novelty (N)                   | Yes: Claims | 4,11,13-20,23-26  |
|                               | No: Claims  | 1-3,5-10,12,21,22 |
| Inventive step (IS)           | Yes: Claims | 4,26              |
|                               | No: Claims  | 1-3,5-25          |
| Industrial applicability (IA) | Yes: Claims | 1-26              |
|                               | No: Claims  |                   |

**2. Citations and explanations**

**see separate sheet**

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**Box No. VI Certain documents cited**

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**1. Certain published documents (Rules 43*bis*.1 and 70.10)**

**and /or**

**2. Non-written disclosures (Rules 43*bis*.1 and 70.9)**

**see form 210**

**Re Item V.**

**1 Reference is made to the following documents:**

D1 : DE 91 07 782 U1 (CHEMATEC AG, MOEHLIN, CH) 19 September 1991  
(1991-09-19)

D2 : EP 0 661 502 A (JAPAN GORE-TEX, INC) 5 July 1995 (1995-07-05)

D3 : PATENT ABSTRACTS OF JAPAN vol. 2003, no. 09, 3 September  
2003 (2003-09-03) -&; JP 2003 148894 A (SHIMIZU CORP), 21 May 2003  
(2003-05-21)

D4 : PATENT ABSTRACTS OF JAPAN vol. 1996, no. 12, 26 December  
1996 (1996-12-26) -&; JP 08 219504 A (JAPAN GORE TEX INC), 30 August  
1996 (1996-08-30)

**2 INDEPENDENT CLAIM 1**

- 2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.  
Document D1 discloses (the references in parentheses applying to this document): A heat exchange laminate (see fig. 1, item 1,2) comprising a formable carrier layer (2) at least partially covered with a flexible liquid retaining layer (1) having an open structure such that a heat exchange medium can directly contact the carrier layer (2) through the open structure of the liquid retaining layer (1).

Also documents D2, D3 and D4 disclose the subject matter of claim 1.

**3 INDEPENDENT CLAIM 21**

- 3.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 21 is not new in the sense of Article 33(2) PCT.  
Document D1 discloses (the references in parentheses applying to this document): A method of manufacturing a heat exchange element comprising: providing a heat exchange laminate (1,2) comprising a formable carrier layer (2) at least partially covered with a flexible liquid retaining layer (1) having an open structure; forming the

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laminate into a heat exchange element (see fig. 3).

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- 4    **DEPENDENT CLAIMS 2, 3, 5-20, 22-25**  
Dependent claims 2, 3, 5-14, 18, 20, 22-25 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT).
- 5    **DEPENDENT CLAIMS 4, 26**  
The combination of the features of dependent claims 4, 26 are neither known from, nor rendered obvious by, the available prior art.
- 6    **INDUSTRIAL APPLICABILITY**  
The subject matter of claims 1-26 is deemed to be industrially applicable (Art. 33(4) PCT).

**Re Item VI**

**Certain documents cited**

| Application No<br>Patent No | Publication date<br>(day/month/year) | Filing date<br>(day/month/year) | Priority date (valid claim)<br>(day/month/year) |
|-----------------------------|--------------------------------------|---------------------------------|---|
| WO2004-065857               | 05-08-2004                           | 23-01-2004                      | 23-01-2003                                      |
| WO2005-019739               | 03-03-2005                           | 20-08-2004                      | 20-08-2003                                      |
| WO2004-040219               | 13-05-2004                           | 31-10-2003                      | 31-10-2002                                      |